

AMENDMENTS TO THE CLAIMS:

Claims 1-4 (cancelled)

5. (Currently amended) A polishing apparatus for polishing a semiconductor wafer, comprising:

a processing section for polishing and cleaning a semiconductor wafer;

a receiving section for supplying a semiconductor wafer to be polished to said processing section and receiving a polished and cleaned semiconductor wafer; and

a ~~positioning mechanism for~~ handling table including

(i) a support member having a tapered surface for contacting a circumferential edge of the polished and cleaned semiconductor wafer such that the polished and cleaned semiconductor wafer becomes centered, and

(ii) a positioning mechanism including a rotatable positioning member for receiving the polished and cleaned semiconductor wafer from said support member and aligning a reference position of the polished and cleaned semiconductor wafer with a predetermined direction.

6. (Currently amended) The polishing apparatus according to claim 5, wherein said ~~positioning mechanism~~ handling table is disposed in a clean chamber disposed between said processing section and said receiving section, with said clean chamber including a partition with a shutter which separates said processing section from said receiving section.

7. (Currently amended) The polishing apparatus according to claim 5, wherein said positioning mechanism further includes a rotating mechanism for ~~holding and rotating the semiconductor wafer, and said rotatable positioning member, and~~ a sensor for detecting the reference position of the polished and cleaned semiconductor wafer, such that the reference position of the polished and cleaned semiconductor wafer can be aligned with the predetermined direction by using an output from said sensor and causing said rotating mechanism to rotate ~~the semiconductor wafer~~ said rotatable positioning member.

Claims 8-12 (cancelled)

13. (Currently amended) A polishing method for polishing a semiconductor wafer, comprising; :

supplying a semiconductor wafer from a receiving section to a processing section;

polishing said semiconductor wafer in said processing section;

cleaning said polished semiconductor wafer;

centering said polished and cleaned semiconductor wafer by contacting a circumferential edge of said polished and cleaned semiconductor wafer with a tapered surface of a support member of a handling table;

from said support member, receiving said polished and cleaned semiconductor wafer by a rotatable positioning member of a positioning mechanism of said handling table, and using said positioning mechanism to align ~~aligning~~ a reference position of said polished and cleaned semiconductor wafer with a predetermined direction; and

returning said polished and cleaned semiconductor wafer to said receiving section.

14. (Currently amended) The polishing apparatus according to claim 5, wherein

said positioning mechanism further includes ~~has a receiving member for receiving said semiconductor wafer,~~ a motor for rotating said ~~receiving~~ rotatable positioning member, and a home-position confirming sensor for confirming a home position of said motor.

Claim 15 (Cancelled)

16. (Currently amended) A processing apparatus for processing a semiconductor wafer, comprising:

a processing section for processing a semiconductor wafer;

a receiving section for supplying a semiconductor wafer to be processed to said processing section and receiving a processed semiconductor wafer; and

a ~~positioning mechanism for~~ handling table including

(i) a support member having a tapered surface for contacting a circumferential edge of the processed semiconductor wafer such that the processed semiconductor wafer becomes centered, and

(ii) a positioning mechanism including a rotatable positioning member for receiving the processed semiconductor wafer from said support member and aligning a reference position of the processed semiconductor wafer with a predetermined direction;

~~wherein said positioning mechanism has a receiving member for receiving said semiconductor wafer, a motor for rotating said receiving member and a home-position confirming sensor for confirming a home position of said motor.~~

Claims 17-18 (Cancelled)

19. (New) The polishing apparatus according to claim 5, wherein said positioning mechanism further has a detecting sensor, and a motor for rotating said rotatable positioning member.

20. (New) The processing apparatus according to claim 16, wherein said positioning mechanism further has a detecting sensor, and a motor for rotating said rotatable positioning member.

21. (New) The polishing apparatus according to claim 19, wherein said handling table is disposed in a clean chamber disposed between said processing section and said receiving section, with said clean chamber including a partition with a shutter which separates said processing section from said receiving section.

22. (New) The polishing apparatus according to claim 19, wherein said detecting sensor is for detecting the reference position of the polished and cleaned semiconductor wafer, such that the reference position of the polished and cleaned semiconductor wafer can be aligned with the predetermined direction by using an output from said sensor and energizing said motor.

23. (New) The polishing apparatus according to claim 19, wherein said positioning mechanism further includes a home-position confirming sensor for confirming a home position of said motor.

24. (New) The processing apparatus according to claim 20, wherein said detecting sensor is for detecting the reference position of the processed semiconductor wafer so as to output a signal for stopping rotation of said motor.

25. (New) The processing apparatus according to claim 16, wherein said handling table is disposed in a clean chamber disposed between said processing section and said receiving section, with said clean chamber including a partition with a shutter which separates said processing section from said receiving section.

26. (New) The processing apparatus according to claim 20, wherein said handling table is disposed in a clean chamber disposed between said processing section and said receiving section, with said clean chamber including a partition with a shutter which separates said processing section from said receiving section.

27. (New) The processing apparatus according to claim 16, wherein said positioning mechanism further includes a rotating mechanism for rotating said rotatable positioning member, and a sensor for detecting the reference position of the processed semiconductor wafer, such that the reference position of the processed semiconductor wafer can be aligned with the predetermined direction by using an output from said sensor and causing said rotating mechanism to rotate said rotatable positioning member.

28. (New) The processing apparatus according to claim 16, wherein
said positioning mechanism further includes a motor for rotating said rotatable positioning member, and a home-position confirming sensor for confirming a home position of said motor.

29. (New) The processing apparatus according to claim 20, wherein said detecting sensor is for detecting the reference position of the processed semiconductor wafer, such that the reference position of the processed semiconductor wafer can be aligned with the predetermined direction by using an output from said sensor and energizing said motor.

30. (New) The processing apparatus according to claim 20, wherein said positioning mechanism further includes a home-position confirming sensor for confirming a home position of said motor.

31. (New) The polishing apparatus according to claim 19, wherein said detecting sensor is for detecting the reference position of the polished and cleaned semiconductor wafer so as to output a signal for stopping rotation of said motor.